POLICY ASPECTS AND INSTITUTIONAL MACHINERY FOR POLICY GUIDANCE AND COORDINATION OF MANPOWER PLANNING AND PROGRAMMING

1. INTRODUCTION

1.1 Manpower planning provides the basis for a planned approach to manpower development, distributive allocation and productive utilization for the acceleration of national development. In the process of establishing this basic linkage, the following should be considered:

(i) the identification, analysis and specification of manpower development and utilization problems, objectives and alternative programmes and strategies;

(ii) the initiation, formulation and administration of manpower policies;

(iii) the development of plans that would synchronize the outputs of the development and utilization components of the overall programme, and

(iv) the co-ordination, monitoring and evaluation of the execution of adopted measures to ensure maximum results.

1.2. To ensure the effective execution of this role, functional national institutional capabilities need to be developed and operated. Consequently the prupose of this guideline is to develop and suggest for discussion a general framework for the development of such a machinery, the staff and other related requirements. When instituted and operated, three major outputs are perceived from the suggested general framework:

(a) definition and formulation of overall manpower policies for the development, distributive allocation and maximized utilization of human resources;

(b) the development of an operating machinery and related manpower planning personnel with appropriate linkage for the identification and formulation of complementary manpower development and utilization policies, plans and programmes for the acceleration of national socio-economic development, and

(c) the development of processed data and information flow systems for effective planning, co-ordinating and evaluating human resources development and utilization programmes.

1.3. In the formulation of related manpower policy and the establishment of the suggested Division, the issues of multisectoral, sectoral and individual organizational manpower policies, accountability and co-ordination within and between sectoral operational linkages should be taken into account. The former issue relates to overall policy guidance, respective sectoral policy integration into national action strategy, administrative machinery and the choice of whether the Central Planning function should

be an integral part of either the Ministry of Planning and Development or the Ministry of Labour or indeed special Ministry for human Resources Development and Management, thus having a centralized function operating within and co-ordinated by an autonomous agency or ministry. In the consideration of this issue, factors such as the priority accorded to human resources planning, development and utilization and the subsequent authority to be accorded to the agency as well as the ranking of national population, education, employment and income objectives, should play an influencial role.

1.4. With regards the issue of operational linkages with other ministries and the private/parastatal organizations, it would be wholesome to establish a central policy guidance, and co-ordinating agency to consolidate efforts of manpower planning activities undertaken by multisectoral or sectoral ministries, agencies and parastatals which should have within their respective planning units, a manpower planning capability specifically for determining, analysing, and ensuring the requisite manpower for the effective implementation of their on-going and anticipated projects. As a suggestive measure to facilitate the development of this capability, the Central Manpower Planning Agency should establish, develop and maintain a viable machinery within itself, as well as foster the development of sectoral units and functional relationship with these sectoral units, but also

(a) establish appropriate central, multisectoral, sectoral and organizational manpower planning units, with related linkages between the central agency with those at multisectoral, sectoral and organizational levels.

(b) recruiting developing and posting to each unit a manpower planner to provide technical leadership and organize their manpower planning activities;

(c) periodic development and issue of procedural guidelines and manuals to facilitate technical operations and smooth co-ordination in manpower planning data collection; and

(c) gradually performing a co-ordinating and collaborating role as a focal point in the manpower planning component within the respective planning units until they become self-sufficient.

1.5 The guideline is divided into five sections. Broad Manpower Policy considerations including the introduction; the structure of the Central Manpower Planning Agency are presented in the second and third sections respectively. The specification of broad functions and terms of reference for the various sections and units within the planning agency is done in section four. The fifth section deals with the manpower (staffing) requirements for the effective implementation of the identified functions.

2. BROAD ASPECTS AND ELEMENTS OF A MANPOWER POLICY

2.1 The general focus of a national manpower planning policy should be aimed at meeting the needs of the entire population through the provision and co-ordination of appropriate guidelines and strategies for the development and productive utilization of the population. It is useful that the policy package takes into account the distinction between manpower, work force and total human resources potential given that different approaches may be required to address specific problems of say the young and aged, the able-bodied and the handicapped and those in corrective and healing institutions.

2.2 Of significance is that manpower policy objectives, goals and strategies should be related to and consistent with other national policy objectives, goals and strategies so as to allow for efficient resource utilization and co-ordination. These other policy areas include (i) education and training, (ii) employment and labour productivity and (iii) national savings, investments and production. As a result of this general rules of thumb, there are three major considerations that should define the direction and scope of a national manpower policy. These are:

(i) the enhancement of national productivity for the stimulation of national income and re-investment;

(ii) the enhancement of self-reliance in income and employment generation at the individual and national levels; and

(iii) the development and promotion of a strategy for the mobilization, development and utilization of the total population.

2.3. Certain steps, strategies and techniques are however required when national manpower planning policies are being formulated and implemented. These are considered in the rest of this section with the view to provide guidance to manpower planning policy makers and managers.

2.3.1 Steps and Strategies needed in the Identification and formulation of a comprehensive Manpower Policy:

Steps:

There are two major steps involved in the identification and formulation of a manpower policy. (i) initiating action and (ii) discussion of drafted policies. Definite assignment of responsibilities in each of the areas with respect to over-all policies must be made to appropriate officers, avoiding overlaps and waste. These steps are as follows:

(a) Initiating action

(i) Determine the end result desired from the policy,i.e. Waht is the objective of this policy? Why is it necessary? What will it accomplish?

(ii) Gather all pertinent facts about the problem.

(a) What is the present policy?

(b) What are the problems about it?

(c) What principles are involved?

(d) What have other nations done about it?

(e) How do other people in other institutions feel about it?

(f) Who are the best qualified people in this field to talk to?

(b) Preparing a draft for discussion, developing content and a tentative outline

(a) discuss alternate course of action

(b) who will be affected by this policy?

(c) who is finally responsible for the end results of the policy?

(d) what will be the effect of this policy on the organization as a whole?

(e) write down major concepts; discuss with appropriate persons for advice, clearances and suggestions.

(f) develop revised draft for further discussions and recommendations.

Strategies

A preferable strategy approach for the initiation of action and the draft preparation for discussion calls for a collaborative effort between the national manpower policy making body and the various arms of Government (education, health, social services, agriculture, nutrition etc.) and labour productivity planning. The ultimate responsibilities for initiating, developing and recommending policies should rest largely on the staff of these respective agencies.

In the discharge of these responsibilities, certain elements need to be taken into consideration.

1. Establishment of the legal basis of the policy

1.1 Review and cite relevant:

- Manpower development and employment circulars,

Cabinet Memoranda on human resources,

Presidential Directives/Orders or Statements and

Related chapters in the relevant/organization Regulations

1.2. Indicate appropriate aspects in the scope of the Law within National Statutes and regulations, manuals and guidelines as issued by the overall manpower policy making and coordination body.

2. Establishment of the operational basis of the Policy

2.1. Review and cite substantive policy elements focusing on:-

(a) the objectives, strategies and functions of manpower planning and programming ;

(b) the administrative machinery for policy guidance and execution regarding

(i) reporting and evaluating content and their frequency;

(ii) extent of inter-ministerial and intersectoral co-operation and collaboration in formulating and executing manpower plans and programmes;

(iii) the nature, scope and timing of activities to be undertaken to ensure maximum results.

2.2 Review and relate to the manpower policy, those policy elements that focused on private and public savings and investment plans and programmes.

3. Establishment of the Institutional basis of the Policy

Each responsible agency/institution, in collaboration with other relevant agencies and institutions, will have to develop adequate capabilities in three interrelated fields of specialization. Accordingly, the policy element should indicate the strategy and component for the development of institutional capabilities in the following:

3.1 Manpower Planning and Programming:

the ability to formulate, develop and integrate within national plans appropriate manpower plans and strategies; and to identify and programme manpower development and utilization activities.

3.2 Manpower Policy formulation, co-ordination and evaluation: the ability to:

(a) diagnose policy implications and formulate policy measures from conducted manpower studies and surveys; and

(b) monitor, co-ordinate, evaluate and report on the implementation of education, training, employment and labour productivity programmes.

3.3 Manpower data and information collection and analysis:

the ability to design, develop administer and publish manpower studies and surveys.

4. Establishment of lines of responsibilities for the policy

Basic to the strategy is the need to clearify and state clear statement of who does what in relation to the formulation and execution of manpower planning programmes. Besides ensuring accountability, the exercise would provide for better co-ordination and resource utilization. Hence manpower policy should delineate and allocate advisory and executive functions and responsibilities at: (i) the national level, (ii) the establishment level and (iii) the sectoral level.

The following general responsibilities and functions are suggestive guidelines which should be considered when formulating a manpower planning policy.

4.1 The President or Head of State

4.1.1 Overall supervision and control of national human resource development and utilization planning.

4.1.2 Approval and transmittal to parliament/house of assembly or related reports and activities as prescribed by the manpower laws of the nation.

4.1.3 Designation of presidential appointments and delegation of authority to Government agencies for initiating and executing manpower planning.

4.2. The Central Manpower Planning Agency

4.2.1 Programme, schedule, design, develop and administer or co-ordinate manpower studies and surveys in support of national manpower policies.

4.2.3. Monitor the implementation of manpower development and utilization policies.

4.2.4 Promoting and co-ordinating the preparation and continuous review, evaluation and adjustments of manpower plans as provided for under the laws and provisions of manpower policies.

4.2.5 Assisting other agencies/institutions in the development of manpower surveys and plans.

4.2.6. Providing technical advisory services to the Chief Executive on ways and means for strengthening the formulation and implementation of manpower policies.

4.3 Public and private sector employers

4.3.1 Provide the necessary manpower data and information as required by Law.

4.3.2 Develop respective manpower policies, and strategies for the development and utilization of their respective staff requirement.

4.3.3 Report to the Central Manpower Planning Agency on the implementation of activities and programmes as contained in national manpower plans.

4.3.4 Participate in the identification and formulation of manpower policies.

2.3.2 Techniques and Actions Required for the Approval, adoption, and Release of the Approved Policies

2.3.2.1 Manpower policies identification and formulation are not ends within themselves for ensuring efficient development and utilization of a nation's human resource. Also of significance in manpower policy administration is the establishment of action that will result in (i) the approval and rectification of the formulated policies at the highest possible decision making level, (ii) the dessemination and interpretation of those policies to the concerned sectors and actors in the economy, and (iii) the over-all commitment and actions to ensure the full implementation of the policies.

In initiating the required action, several trial and error techniques and questions are involved though their nature depends on the requirements and organization of a particular country. Among the most common of these are the following:

2.3.3.3 On the Approval of Policies:

(i) Review proposed statement for accuracy, brevity, and completeness - Is it necessary? Does it accomplish the objective for which it is designed?

(ii) Secure competent technical advice regarding the adequacy of the statement. Is it in conformity with acceptable practices within the Public Service? If not, does it cover the deviations desired? Is there further research required before it is recommended for adoption?

(iii) With whom should this policy be cleared before further action is taken? Have all necessary clearances and comments been secured by those affected by this proposal policy? What are the differences in opinion in order of importance, in the event there is lack of agreement on the part of all persons affected? Should further effort be made to secure a consensus before any action is taken?

(iv) What concurrences are necessary before this policy should be recommended for approval - by whom? Have all necessary concurrences been secured? If not, why?

(v) What is the highest point of authority required for final recommendation on this policy? Is this policy ready for review, and recommendation?

(vi) Who is authorized to approve this policy? Is the draft complete in every detail, with the required recommendation, and ready for consideration and approval?

(vii) When should this action be submitted to the approving authority?

(viii) What official records are required, and what notifications of approval are sent to whom?

2.3.2.3 On the release and interpretation of policies

(i) Determination of persons affected, co-ordination required.

(ii) Timing the release, and manner of release; is distribution of copy sufficient, or should group meetings be called for supplementary interpretations? If meetings are required, what details are involved as to media and mode of communication.

(iii) Day-to-day administration of the policy; who interprets what to whom?

(iv) Who administers exceptions to policy?

(v) Style and format of release, if not a standard policy manual issue?

(vi) Who spot-checks interpretations to ensure uniform understanding and acceptance?

2.3.2.4 On Commitments and Actions for the Implementation of Policies

(i) Prescribing adequate regulations to assure uniform understanding and observance.

(ii) Designating respective responsibilities, authorities and accountability for carrying the policy into effect.

(iii) Clarifying administrative controls with respect to the policy; who is accountable for what controls established by the policy?

(iv) Reviewing and evaluating periodically all policies in effect; co-ordinating the whole process and making necessary adjustments.

3. ADMINISTRATIVE ASPECTS OF MANPOWER PLANNING FOR POLICY GUIDANCE AND PROGRAMME COORDINATION

3.1 The establishment and operation of an effective institutional machinery for manpower planning and programming will enhance greatly the formulation, coordination and implementation of a comprehensive national human resources development and utilization policy. Basic to this machinery is the specification of respective functions, responsibilities and expected outputs of the various organs within the machinery. The purpose of this section is to outline those basic functions, responsibilities and outputs.

3.2 A summary of these together with a suggestive organizational structure of a manpower planning division or agency is presented in figure 1. It should be noted that these broad functions and sectional demarcation could be combined, narrowed, or broadened in accordance with the scope and needs of national programmes.

3.3 Broad Functions of Sections and Units

3.3.1 Surveys social studies and information section

1. Programme, design, develop and administer and/or co-ordinate manpower surveys.

2. Develop and/or revise techniques and methods for assessing and forecasting present and future manpower supply and demand by occupation and industry as well as those for estimating present and future training needs for high-level occupations.

3. Collaborate in the design and conduct of periodic income, establishment and labour force and labour market surveys.

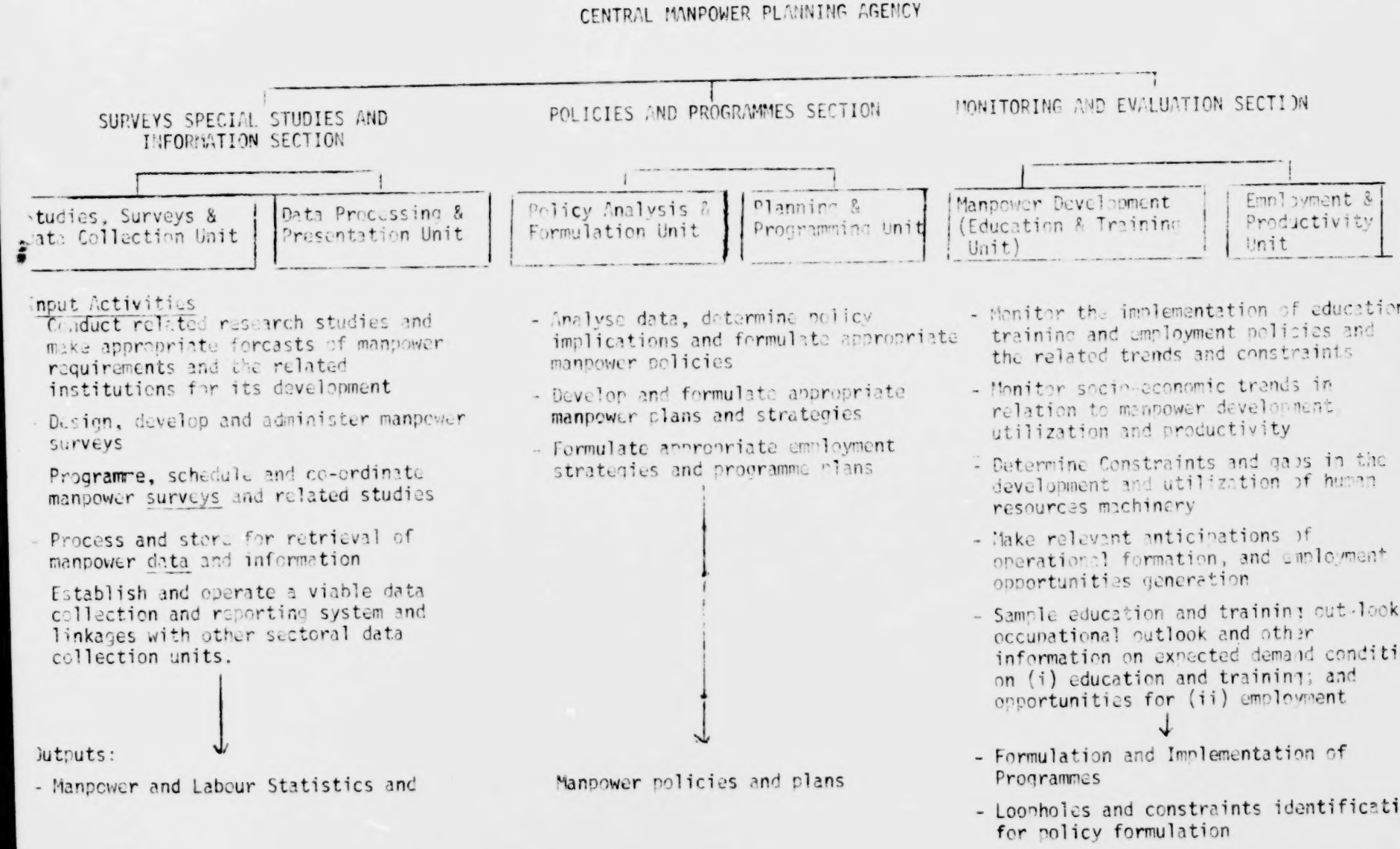
4. Assemble, analyse, extract, translate and publish data related to the labour force, the labour market, the industrial and non industrial sectors and the educational and training institutions with the view to:

   (a) determine and project the flow of present and future high and middle-level manpower stock within the economy; and

   (b) determine and project present and future skill requirements in response to national development objectives.

5. Establish and operate a viable human resources data collection and reporting system and linkages with sectoral data collection units with the aim to produce periodic manpower, labour force and education statistical time series.

Fig.1: ORGANIZATIONAL STRUCTURE AND SUMMARY OF FUNCTIONS FOR A CENTRAL MANPOWER PLANNING AGENCY


CENTRAL MANPOWER PLANNING AGENCY
SURVEYS SPECIAL STUDIES AND INFORMATION SECTION
POLICIES AND PROGRAMMES SECTION
MONITORING AND EVALUATION SECTION
tudies, Surveys & ata Collection Unit
Data Processing & Presentation Unit
Policy Analysis & Formulation Unit
Planning & Programming Unit
Manpower Development (Education & Training Unit)
Employment & Productivity Unit
nput Activities
Conduct related research studies and make appropriate forcasts of manpower requirements and the related institutions for its development
- Design, develop and administer manpower surveys
Programme, schedule and co-ordinate manpower surveys and related studies
- Process and store for retrieval of manpower data and information
Establish and operate a viable data collection and reporting system and linkages with other sectoral data collection units.
- Analyse data, determine policy implications and formulate appropriate manpower policies
- Develop and formulate appropriate manpower plans and strategies
- Formulate appropriate employment strategies and programme plans
- Monitor the implementation of education training and employment policies and the related trends and constraints
- Monitor socio-economic trends in relation to manpower development utilization and productivity
- Determine Constraints and gaps in the development and utilization of human resources machinery
- Make relevant anticipations of operational formation, and employment opportunities generation
- Sample education and trainin; out-look occupational outlook and other information on expected demand conditi on (i) education and training; and opportunities for (ii) employment
Outputs:
- Manpower and Labour Statistics and
Manpower policies and plans
- Formulation and Implementation of Programmes
- Loopholes and constraints identificati for policy formulation

In turn, the following units and related functions could be delineated from this major function:

(i) Plan and design in collaboration with the Policies and Programming Section, the nature, scope, coverage and dimensions of the required data for manpower surveys and studies;

(ii) Programme, schedule and participate in or co-ordinate the conduct of manpower surveys/studies;

(iii) Determine in collaboration with the Policies and Programming Section the respective instruments and strategies for manpower surveys; and identify the required resources and facilities for the conduct of such surveys/studies;

(iv) Assemble, breakdown, review and periodically update available manpower and education data;

(v) Collect, collate and store relevant data from other agencies.

(b) Data Processing and Presentation Unit

(i) Retrieve raw data, code, tabulate and present in accordance with specified classification and form for manpower development and utilization planning, i.e. policy formulation and implementation;

(ii) Establish, develop and operate a viable manpower development and utilization data bank and information system together with appropriate linkages with other sectoral data collection units;

(iii) Determine adequacy and implications of available data in relation to the formulation and implementation of manpower development and utilization plans; indicating problem areas and advising on ways to improve the data utility;

(iv) Develop appropriate manuals in collaboration with the Surveys and Data Collection Unit, for designing, conducting and processing of manpower surveys;

(v) Make projections of crude data to determine future manpower supply and manpower demand;

(vi) Develop and maintain an inventory of high level and skilled manpower in collaboration with other relevant agencies.

3.3.3 Policies and Programming Section

1. Study and analyse labour market studies, establishment surveys, industrial and non-industrial investment studies, education plans and population statistics with view to:

(a) identify problem areas relative to manpower development, manpower deployment and manpower utilization and advise on ways to solving them;

(b) determine their policy implications in relation to overall national development;

(c) formulate appropriate human resources development and utilization policies, strategies and periodic manpower plans and profiles.

2. Participate in the formulation and preparation of national socio-economic development objectives, policies and plans.

3. Develop and adjust manpower planning models and up-date analysis procedures to guide the Surveys and Information Section.

The following unit level functions could be derived from this major function.

(a) Planning and Programming Unit

(i) Formulate and develop appropriate manpower plans and strategies as part of overall national socio-economic development programmes by studying;

- the formulated manpower development and utilization policies measures and strategies;
- projected manpower supply and demand statistics;
- national needs and available resources.

(ii) Identify and programme manpower development and utilization activities and integrate these with overall national development plans and programmes;

(iii) Specify the type, scope and nature of information and data required for the formulation of manpower planning and if necessary, participate in the design of data gathering processes.

(b) Policy Analysis and Formulation Unit

(i) Analyse studies and research findings and interprete demographic, labour market, education and other relevant data with the aim to diagnose their policy and programmes implications for national development;

(ii) Initiate and formulate broad population, education, training and employment objectives and policies for incorporation in national development plans and national employment and productivity plans; and national investment and production plans.

(iii) Assess national and regional policies for industrial and agricultural development, employment and productivity, education and training and establish functional linkages and consistencies among the various policies.

3.3.3 Monitoring and Evaluation Section

1. Monitor, co-ordinate, evaluate and report on the implementation of:

   - national vocational training and education programmes
   - employment, income and labour productivity schemes
   - social security and population adjustment programmes

2. Collaborate with appropriate agencies on the identification and development of programmes and measures that will enhance the effectiveness of manpower development and utilization programmes and plans.

3. Identify institutional and operational gaps, problems and constraints surrounding the implementation of manpower plans; and suggest possible adjustments for maximum results.

4. Monitor socio-economic trends in relation to manpower development, allocation and productivity.

The following unit level functions could be delineated from the above major function:

(a) Education and Training Monitoring Unit

(i) Review and develop proposals for the reformulation of education and training policies and objectives;

(ii) Monitor education and training development trends, enrollment outputs, dropout rates, teacher population trends in relation to the meeting of national skilled manpower requirements,

(iii) Evaluate short and long-term education and training facilities, systems and resources so as to identify problem areas and solutions;

(iv) Collaborate with the Ministry of Education and training institutions in the identification and development of programmes and measures for the development of the required skills.

(b) Employment and Labour Productivity Unit

(i) Review and develop proposals for the reformulation of employment generation and labour productivity policies and objectives;

(ii) Monitor and co-ordinate programmes that affect the size, composition and other characteristics of the labour force, the labour market and the product market,

(iii) Evaluate and report on social welfare programmes, wage and incentive determination schemes, workers and employer attitudes and national investment promotion programmes with view to (a) identifying constraints and problems and (b) suggesting possible solutions,

(iv) Collaborate with the Ministry responsible for Labour Affairs, employers and employee organization, and social welfare institutions in the identification and development of programmes and measure for generating productive employment, income and increasing labour productivity.

4. STAFFING REQUIREMENTS FOR EFFECTIVE MANPOWER PLANNING

4.1 The staff size for each of the above sections should depend upon:

(a) the size, composition and structure of the labour force;

(b) the volume of work envisaged or to be performed;

(c) the efficiency level of other ministerial units collaborating in the identification and implementation of manpower development and utilization objectives and policies and

(d) the availability of adequate financial and human resources.

4.2. Whatever is the case, the following should constitute the core of professionals from which a team could evolve if the output targets of the Division/ Agency are to be met:

4.2.1 Division Head

The Officer must be a qualified and experienced manpower or education planner with considerable administrative and/or public administration and management experience. He/she must have the requisite status and authority to be able to relate effectively with other heads of departments and organizations in both the public and private sectors.

In the absence of a manpower planner or an educational planner, the Officer could be one of the following and should have had an appreciable level of training in manpower planning:

(i) Development Economist or Administrator

(ii) Sociologist

(iii) Demographer

4.2.2 Surveys, Special Studies and Information Section

The combination of the following types of personnel, given appropriate orientation, should provide the core staffing requirement for the section:

(i) Professional Staff

(a) Applied and Mathematical Statisticians

(b) Demographers

(c) System Analyst and/or Computer Programmer

(d) Sociologist

(e) Macro Economists

(ii) Sub-Professional/Technical Staff

(a) Statistical Assistants

(b) Ad-hoc field workers

(c) Enumerators

4.2.3 Policy and Programmes Section

In addition to specialized training in manpower planning and policy analysis and formulation the Officers must have at least a university honors degree in one of the following fields:

(i) Macro Economics

(ii) Economic Development and Planning

(iii) Education and/or Vocational Training; and

(iv) Demography.

As such, the staff whose size is a function of national needs and available resources should be a team composed of:

(a) Labour and Manpower Economists

(b) Macro-Economic and Education Planners

(c) Development Economists

(d) Public Administrators

4.2.4 Monitoring and Evaluation Section

Officers must have at least a university honours degree in one of the following fields:

(i) Manpower Economics

(ii) Economic Planning and Development

(iii) Public Administration and Management

(iv) Education and

(v) Sociology.

Particularly, they must develop capacities and capabilities for project development, project monitoring, and project evaluation and for making recommendations for policy guidelines. Accordingly the team should be composed of:

(a) Economic development planners

(b) Public administrators and managers

(c) Education and vocational training planners

(d) Sociologists

(e) Labour economists.

5. DATA AND INFORMATION REQUIREMENTS

5.1 In manpower planning, statistic and information is required for one or more of four primary reasons: first to evaluate current manpower supply and demand situations relative to national goals; second for estimating future manpower resources and requirements, third, for identifying manpower development and utilization problems with a view to formulating policies and programmes to redress these problems in light of national needs; and finally, to assist in providing vocational and career guidance to ensure an effective distribution of skills and careers within sector and region.

5.2. Consequently, the types and structure of information required should be such that it will help to provide answers to a number of questions, among which are the following three:

(i) Given national development objectives,what are the current and future manpower and employment situations?

(ii) What are the size, composition, qualities, level of diversity and aspirations of the present and future work force and how best can these be adjusted for maximum productivity?

(iii) What can and should be done nationally to (a) improve and maintain the quality of labour, and (b) satisfy the equilibrium conditions of the labour market?

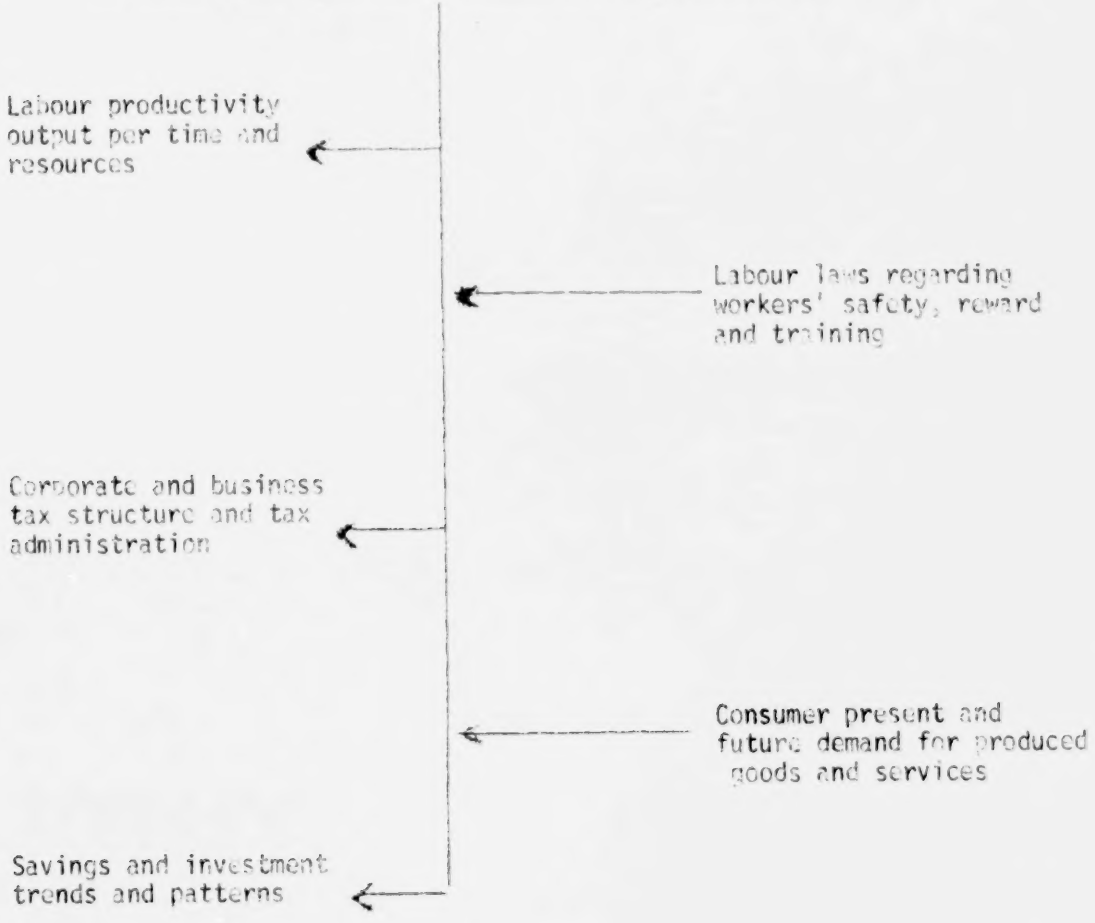
5.3 To talk of integrating manpower planning into overall national development planning, is partly to provide appropriate answers to the above questions. In so doing, manpower planners will have to develop the abilities to (i) identify the types and forms of data and information required; (ii) locate, process and analyse available administrative and quantitative data and information and (iii) collaborate with national data collectors for the collection of statistics and other information on a systematic and periodic basis. Perhaps the inabilities of African manpower planners to perform these three tasks have given cause to the consistent claim of data deficiency in Africa for manpower planning purposes.

5.4 The purpose of this section therefore is to provide a guide towards identifying the types, forms and sources of statistical and other information required for manpower planning. Hopefully with the types and sources identified, issues such as locating information and collaborating with data collectors would be addressed partially. There are three parts to the section. The first part describes broadly those specific areas of interest to the manpower planner for which statistical data and other information would need to be assembled and processed. This is followed by the identification of the types and utility of data and information required for manpower planning. The last section identifies primary and secondary sources from which the required data and/or information can be derived.

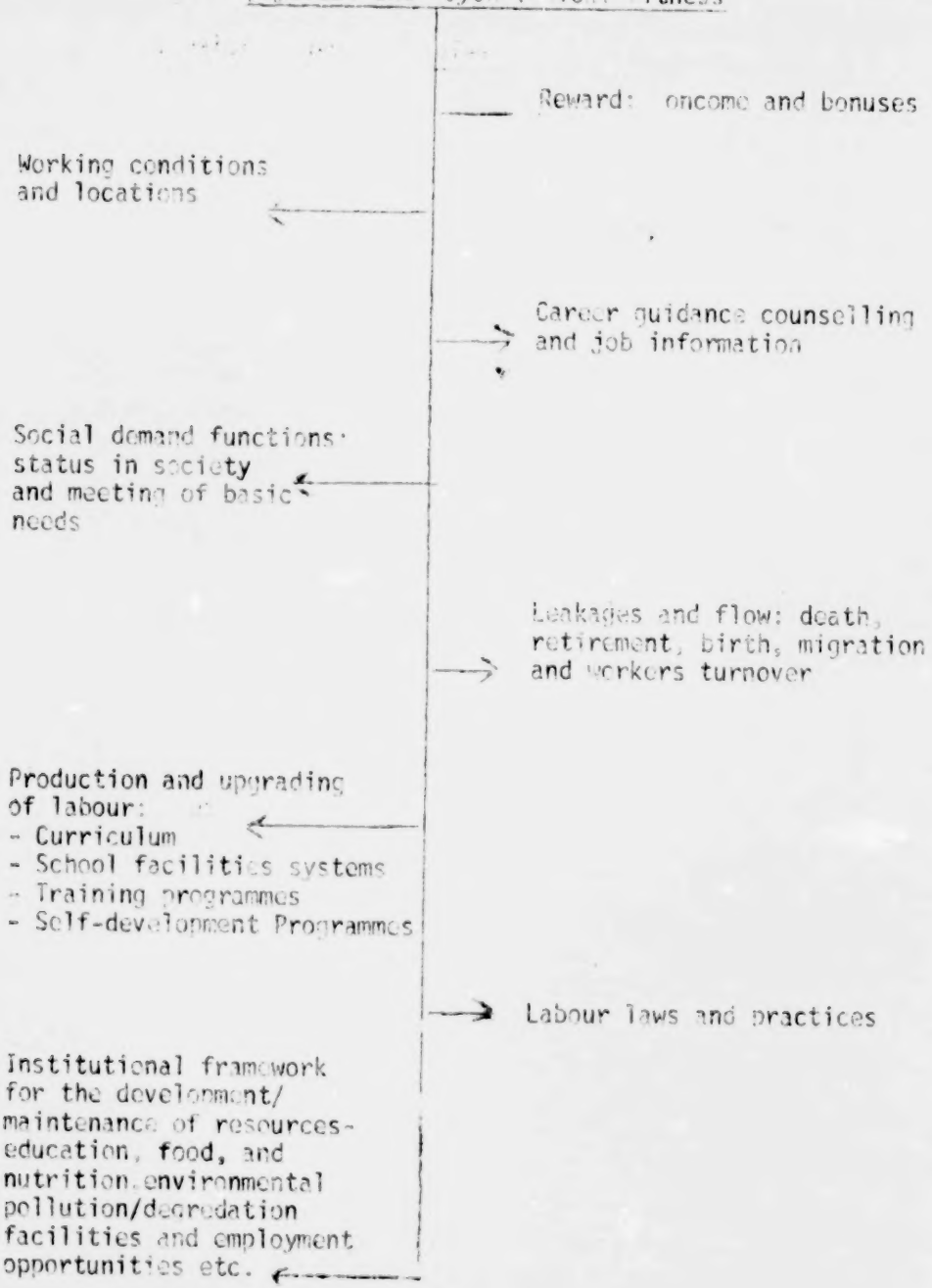
5.5 Areas of interest for the manpower planner

The buyers and renters of labour negotiate around a package of skills, knowledge, attitudes, physical and psychological fitness. It is therefore the task of the manpower planner to assess, match, and project the demand for and supply of these human value resources. To perform this task, the manpower planner should judiciously analyse those factors that influence labour demand and labour supply functions. The general nature of these factors, which ought to be of utmost interest to the manpower planner; and for which statistical data and other information need to be assembled and processed, are shown in the diagrams below. It should be noted that the combined effects of these factors not only shifts the demand and supply curves of labour outward, but determines the quality level of labour.

(a) Factors affecting demand for human skills, knowledge, attitudes, physical and psychological welbeing, and efficiency


Labour productivity output per time and resources
Labour laws regarding workers' safety, reward and training
Corporate and business tax structure and tax administration
Consumer present and future demand for produced goods and services
Savings and investment trends and patterns

(b) Factors affecting supply of human skills, knowledge, attitudes physical and psychological fitness


Reward: oncome and bonuses
Working conditions and locations
Career guidance counselling and job information
Social demand functions: status in society and meeting of basic needs
Leakages and flow: death, retirement, birth, migration and workers turnover
Production and upgrading of labour:
- Curriculum
- School facilities systems
- Training programmes
- Self-development Programmes
Labour laws and practices
Institutional framework for the development/ maintenance of resources- education, food, and nutrition. environmental pollution/degredation facilities and employment opportunities etc.

5.6. Types of Data and Information Required for Manpower Planning and their Sources

The manpower planner needs to have, either by generation or by collation, a series of periodic data and information to facilitate judicious analysis on each of the above factors of interest. The required data or information could be primary or secondary depending on the need for which it is obtained or on the use to which it is put. It is considered primary when used as dependent variables in an objective function. When used as broad parameters or guidepost to arrive at a conclusion, it is considered as secondary. The important point is that when the data or information is of the primary nature, all efforts to ensure its reliability and relevance should be made by the manpower planner. This rule of thumb is also true of secondary data but to a lesser degree.

5.7. Types of data or information required

The types of quantitative and qualitative information needed for manpower planning are classified under four broad groupings. The basis for this classification is to allow manpower planners to (i) better organize the process of data collection, and (ii) facilitate sector analysis in relation to manpower programmes.

The four main groups and their sub-groups are:

(i) Production information

- Agriculture
- Industry and service
- Wholesale and retail trade

(ii) Demographic indicators

- Aggregates
- Vital statistics
- Migration

(iii) Social information

- Education and training
- Health
- Employment and conditions of work
- Household statistics
- Nutritional status

(iv) Financial information

- National accounts
- Disposable income and savings
- Price indicies
- Public finance regulations and statements

5.8 Utility of data to the manpower planner

Before considering the particulars of the above required information, it would be appropriate to briefly examine the utility of each major group to a manpower planner.

(i) Production information: There is evidence that agriculture is the most important activity in Africa. Industrialization through import substitution on the other hand is of great concern to many African governments. Trade and services do play significant roles in the productive lives of the African peoples. As such, activities in these areas provide employment to and account for income of a large part of the population. Therefore, indicators in connexion with national efforts at efficiency and increased productivity in each of these sectors will have to be sought to socially assist with the:

- formulation of employment generation policies and programmes
- determination of present and future manpower needs
- development and monitoring of a system which ensures labour transfer from say agriculture to industry or to the tertiary and informal sectors or vice-versa.

(ii) Demographic indicators: The size, nature, direction and frequency of movements and distribution of the population as well as its elements of change provide a basis for manpower planning. In as far as planning for manpower development and utilization is concerned, they are basic factors in determining the magnitude and character of the demand for goods and services as well as the extent and quality of the labour resources for their production. Regarding policy matters the manpower policy formulator would have to study and analyse the characteristics, structure, size, and composition of the population. This action is necessary because the direction, consistency and magnitude of changes associated with these indicators, will have implications for the development and structuring of education and training facilities as well as for deriving and manupulating equilibrium conditions in the labour market. In any case manpower policy objectives should take into consideration the impact of population dynamics on the process of economic growth and income distribution. Finally, manpower surveys and planning models will have to be undertaken and developed respectively. This exercise relies on the use of demographic variables to provide survey sampling frames and decendent and independent variables into the various simulation models.

In short, demographic indicators are needed for application in manpower planning as:

- yardsticks for manpower policy formulation and management;
- variables within manpower development and manpower utilization planning models;
- sampling frames for organizing manpower surveys.

(iii) Social information: This type of information is of great value to the manpower planner. Besides its usage for broad policy formulation, the nature of households, their consumption patterns, income, savings, performance abilities and productive activities do provide benchmarks for assessing the quality level of present and future human stock.

In this regard, three essential issues are of prime concern to the manpower planner. First, though it is often said that a sound body makes a sound mind, a manpower planner's pre-occupation goes beyond a sound mind to include the development of attitudes, stimini for effectiveness of the work force. Concensus is growing that all of these factors are highly influenced by sound health and nutritional programmes. Consequently, the manpower planner would need to collect the relevant information for analysis purposes. Secondly, it is now generally known that a relationship ought to exist between the specific needs of a given population and the types of goods and services made available by a productive work force. This proposition imposes upon the manpower planner a need to ensure an appropriate and balanced education and training programme with the world of work, a task which requires the use of education and other social statistics. Finally, income distribution profiles are accepted as major indicators for socio-economic development. The later is a function of labour productivity. Other labour productivity functions centred around the payment of indirect incomes such as favourable working conditions, safe working environments, etc. Hence, being concerned with measures that would enhance productivity, the manpower planner would need to assess, through the use of household data, productivity strategies and outcomes.

In short, social statistics would be needed to enable the manpower planner to assess and formulate policies and programmes that would evolve around three interrelated inputs for the enhancement of labour productivity. These are:

- the planning and execution of an adequate health programme;
- the content, appropriateness and distribution of education and training opportunities, facilities and programmes in relation to population dispersion, composition and national needs;
- the institutionalization of direct and indirect incentives and reward system for productive activities.

(iv) Financial information: A manpower planner is interested in this type of information for a number of reasons. The basic underlying rationale is that financial statistics form the basis for formulating monetary and fiscal policies. Together, these two forms of financial policies determine the expansion or contraction of the magnitude of money circulation in an economy. A resulting impact of this circulation is manifested in the fluctuation of consumer price levels with its consequential influences on the demand for and the supply of goods and services in the product market. As indicated elsewhere, the pattern and trend of demand and supply functions of labour do respond to what's happening in the product market.

In so far as it affects the manpower planner, these responses are made for adjusting the equilibrium conditions of the labour market with particular attention on (a) the identification, development and projection of the types, levels, and quantity of manpower needed and available for a productive activity; (b) the determination of incentives and rewards for the types of skills, efficiency, attitudes, physical and psychological welbeing required of a worker; and (c) the creation and distribution of job opportunities for a growing population.

Consequently, the manpower planner needs financial information which relates to national and personal generated and disposable incomes, savings and consumer price indices to facilitate the assessment of:

- the labour absorptive capacity of the economy;
- future and present manpower requirements by types and levels;
- employment generation strategies and options.

We now turn to the detailed specification of the required information. It should be stressed that the list below is not exhaustive and that the specific type, form and magnitude of whatever is needed would depend on prevailing circumstances and the choice and objective function of the manpower planner. Also to be stressed is that the manpower planner is not expected to generate most of these information, but rather to know where and how to get them for use.

PRODUCTION

(a) Agriculture

(i) Area and number of agricultural holdings classified according to size (total area), kind of tenure and principal activity;

(ii) Number of agricultural holdings classified by type of power used and implements used;

(iii) Gross capital formation in agricultural machinery and equipment.

(iv) Index of agricultural production;

(v) Number of persons engaged and average earnings;

(b) Industry and service

(i) Number of establishments, number of persons engaged classified by kind of activity and size of establishment;

(ii) Total wages, salaries and earnings classified by kind of establishment, activity and occupation;

(iii) Index number of industrial production consumption and stocks according to industry;

(iv) Gross capital formation machinery and equipment capacities by type of capital goods, activity and establishment;

(v) Investment incentive legislation and administration.

(c) Wholesale and retail trade

(i) Number of persons engaged by kind of activity, type of operation and kind of business;

(ii) Value of sales and of gross margins classified by kind of activities;

(iii) Gross capital formation classified by type of capital goods and kind of activity.

DEMOGRAPHIC

(a) Aggregates

(i) Number of persons by sex, broad age groups literacy, type and level of education completed, birth place, and nationality;

(ii) Number of persons by sex, broad age groups location and professional status;

(iii) Annual and expected population growth rates;

(iv) Distribution of population by kinds of households and economic activity.

(b) Vital statistics

(i) Age and sex specific and crude fertility and mortality rates by region;

(ii) Life expectancy and dependency ratios by sex, age and region;

(iii) Index of population participation rates by sex, age and region;

(iv) Age and sex specific crude survivor rates by region.

(c) Migration

(i) Number of immigrants classified by sex, age, occupation and nationality;

(ii) Number of emigrants classified by sex, age and occupation

(iii) Rates and trends of in and out migration;

(iv) Number of migrants from region to region classified by age, sex and profession.

SOCIAL

(a) Education and training

(i) Number of establishments classified by level of instruction, type of establishment by geographic distribution;

(ii) Number of teachers by age, sex, qualification, nationality and areas of specialization and level of institution.

(iii) Number of students enrolled by sex, training areas, levels and region;

(iv) Curriculum content and sylabus by type and level of establishment and geographic distribution.

(v) Intakes promotion, drop-outs, repeaters and output rates by sex, age and location and establishment;

(vi) Content and frequency of student counseling and guidance programmes by type of establishment.

(b) Health

(i) Number of patients in hospitals and health centres by age, sex and location of institution

(ii) Number of hospitals, health centres and hospital beds by type of institution and location.

(iii) Number of medical and auxiliary personnel, physicians nurses, dentists etc. by sex and location of institution;

(iv) Capital outlays of health institutions and public health authorities by type of service;

(v) Policies, practices and capital outlays on nutrition programmes.

(c) Employment and conditions of work

(i) Number of persons employed by sex, age, nationality and location of business;

(ii) Number of persons looking for employment by age, sex, skills, occupation and education;

(iii) Workers turnover rates;

(iv) Wage rates, earnings, supplementary benefits and related information classified by age and sex, by occupation and kind of economic activity;

(v) Work injuries by place of occurence, cause, type and severity;

(vi) Number of self employed persons by sex, age, activity and location;

(vii) Labour legislation and union activities;

(viii) Information on job title description by minimum education/training/working experience required for each job;

(ix) Information on social security and welfare schemes by establishment and size of coverage.

(d) Household statistics

(i) Household composition, number of wage earners and total household receipts;

(ii) Information about nature of household, their consumption patterns, habits and household subsistence and industrial activities.

INCOME, FINANCE AND BANKING

(a) National accounts and finance

(i) Gross domestic product classified by kind of economic activity;

(ii) National disposable income and outlay by economic categories showing savings or deficit;

(iii) Final consumption expenditure of general government classified according to purpose.

(b) Banking

(i) Discounts and rediscount rates, average interest rates, prime bank loans and advances;

(ii) Consolidated transaction (capital finance) accounts and balance sheets.

5.9 Sources of manpower information

A population census is the primary information source for any manpower analysis since it is a total count of a country's population whose efficient development and utilization constitute the ultimate objective of manpower planning. This source of data gathering gives, in addition to other information, valuable statistics on the personal and economic characteristics of the present and future working and school-going age population.

Personal characteristics statistics such as age, sex, education, geographical location, marital status, etc. do provide the manpower planner with indispensable information for analysing the composition, distribution, and structure of the population as an initial step for estimating the future manpower supply. Information on occupational and industrial attachment, personal income levels and migration patterns do give some indication of the economic characteristics of the labour force. Of relevance to the manpower planner is that when the economic characteristics data are cross-classified by age, sex, educational levels and other personal characteristics, the the resulting matrix provides a much clearer picture of the composition and quality of the current and potential work force.

Given the elements of time lag and cost associated with the taking of a population census, and more importantly, the need for current and specific data, several supplementary and/or complementary sources of information are generally used for manpower planning purposes. Though they may vary from country to country, primary sources for such information are usually national government reviews and reports and administrative records of public and private institutions. Depending on the manpower planner's objective and resources, a number of manpower data and information are developed from these two primary sources. Among these are the following:

(i) Labour force sample surveys: To generate information on the number of people in the labour force during a specified period, classified by sex, age, employment status (i.e. employed, unemployed under-utilized), type of worker, earnings, geographical distribution, industrial distributions, occupation, educational attainment and duration of employment or unemployment.

(ii) Establishment surveys: To generate information on the number of employees in the country and in each major area classified by type of economic activity, occupations, sex, age, average monthly or weekly or hourly earnings and average hours worked. Additional information include labour turnover frequency, output per head and capital employed.

(iii) Household surveys: To provide information on the employment, consumption and savings status of household members classified by sex, age, marital status, geographical distribution, occupation, educational attainment, hours worked and size of household income and expenditure.

(iv) Industrial and agricultural surveys: To generate information on employment in industry and agriculture in relation to production volume detailing the characteristics of the labour force, size of operation machines used, problems of labour recruitment and retention.

(v) Labour market surveys: To generate data on labour supply and labour demand in specific areas by occupation, establishment and location. Also information on the characteristics of job-seekers by age, sex, marital status, educational attainment as well as information on vacancies and their associated labour requirements. Information on employment conditions and wage structures will also be generated.

(vi) National economic development plans: To generate information on national priority objectives and aspirations and the institutional framework within which they are to be implemented classified by sectors, industry, location and resource requirements.

(vii) Education and training and other social-welfare statistics.

To generate information on number of institutions and number of classes classified by level of education and by type of institution; number of teachers by sex, age, level of education; number of enrollment by sex, specialization and level of training or grade, number and types of awards by type of institution and geographical distribution.

(viii) National economic surveys. To provide information on the performance of the economy, its absorptive capacity and national accounts statistics.

(ix) University and independent research papers: To generate information on current developments in the areas of manpower development and utilization planning primarily for policy purposes. Estimates and projections of relevant data can also be obtained.

(x) Administrative records relative to the following

- a reporting system of vital statistics
- a reporting programme on internal and external migration
- social security programmes
- labour union policies and practices
- national and international institutional annual reviews and reports.